# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start		Rating **	Α	Issue No.	2			
LM End		Issue Type +	Ма	Location *	ws			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item		perations & Maintenance			0		0	
пеш	Manuals				0		0	
DWR ID	DWR_RD2	062_01_f _ 201	3_2					
		Action/	Comme	nts				
Inspector office.	Action/Comments Inspector Comments: The O&M Manaual is available at the LMA's office.							

No Photos

LM Start		Rating **	Α	Issue No.		5	
LM End		Issue Type +	Ма	Location *	WS		
Catagory	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Emergency Supplies &				0		0
пеш	Equipmer	nt			0		0
DWR ID	DWR_RD2	062_01_s _ 201					
	Action/Comments						

No Photos

Inspector Comments: Adequate flood fight supplies are available onsite.

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_RD2	062_01_s _ 201	13_8	'		'	
		Action/	Comme	nts			

No Photos

Inspector Comments: The LMA has a flood fight emergency response plan.

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.91	Rating **	С	Issue No.		7	
LM End	0.91	Issue Type +	Ма	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR Ero	sion Survey		37.80408	30 °	37.804080	0
пеш				-121.31406	60°	-121.314060	0
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013. This was repaired prior to the boat survey. No new erosion found at the site

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed at the site. There is vegetation on the slope. There is a bridge construction site just upstream of the erosion. The impact of the construction may need to be monitored.

09/07/2010: No significant change observed on site. Sloughing of the existing rip rap revetment on the lower slope has developed into an erosion pocket. There is moderate annual grass growth on the slope. 08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: Per Michael Moncrief of MBK, site is scheduled for repair this year.

2009: Landside ground surface has been raised to the height of the levee crown; sloughing of the existing rip rap revetment on the lower slope that has created a pocket, exposing underlying soil; Site # is the same RM54.34,LM1.08; previously rated "M".

2006: Previously marked with stake. [2014 Site

ID:RD2062U01RM54.14]

LM Start	1.83	Rating **	С	Issue No.	11		
LM End	1.83	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Animal Control				37.7918	73 °	37.791873	
пеш			-121.3133	50 °	-121.313350		
DWR ID	DWR_RD2062_01_s _ 2012_11						

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.84	Rating **	С	Issue No.	16			
LM End	1.84	Issue Type +	Ма	Location *	WS			
Category	Earthen L	evee		GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	Animal Control			37.7918	87 °	37.791887		
пеш				-121.3131	78 °	-121.313178		
DWR ID	DWR_RD2	2_16						
	Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start 1.85 Rating \*\* Issue No. 12 Issue Type + Location \* WS 1.85 Ма LM End Earthen Levee GPS Latitude/Longitude Category End **Animal Control** 37.791798° 37.791798 ° Item -121.312904 -121.312904 ° DWR\_RD2062\_01\_s \_ 2012\_12 DWR ID

#### Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of a rodent hole on the waterside levee slope.

LM Start	2.58	Rating **	Α	Issue No.		6	
LM End	2.58	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	egetation			59 °	37.788659 °	
пеш			-121.30882	29 °	-121.308829 °		
DWR ID	DWR_RD2	062_01_f _ 201	4_6			·	
	Action/Comments						
Control an	nual grass	and weeds o	n the lev	ee slopes a	nd e	easements.	



View of acceptable vegetation control.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable M: N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.04	Rating **	С	Issue No.	12				
LM End	2.04	Issue Type +	Ма	Location *	LS				
Category	Earthen L	evee		GPS Lat	tud	e/Longitude			
Category				Start		End			
Item	Animal Co	ontrol		37.79706	°	37.797060	0		
пеш				-121.35992	e °	-121.359929	0		
DWR ID	DWR_RD2	2_12							
	Action/Comments								

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Burrow activity that appears to be active, no rodents seen.

No Photos

Rating \*\* Issue No. LM Start 2.10 С 18 Issue Type + Ma Location \* LS LM End 2.10 Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 37.797558° 37.797558 ° Item -121.360815 ° -121.360815 DWR RD2062 02 s 2012 18 DWR ID

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Multiple large burrows, appears to be active.

No Photos

Rating \*\* Issue No. LM Start 2.19 С 19 2.19 Issue Type + Ма Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category End Start **Animal Control** 37.798304° 37.798304 ° Item -121.362138 -121.362138 DWR ID DWR\_RD2062\_02\_s \_ 2012\_19

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Large single active burrow.

No Photos

Location LS: Land Side

N/A: Not Applicable

WS : Water Side

U : Unacceptable

: Acceptable

Minimally Acceptable

N : Not Inspected/Rated

C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.84 Rating ** A		Issue No.		20	
LM End	2.84	Issue Type +	Ма	Location *	Location *	
Cotogony	Category Earthen Levee			GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.8035	79 °	37.803579 °
item				-121.3715	38 °	-121.371538 °
DWR ID	DWR ID DWR_RD2062_02_f _ 2014_20					
		Action/	Comme	nts		

Control annual grass and weeds on the levee slopes and easements.

# Photo 1 of 1: FA\_2014\_RD2062\_310\_20\_20141124\_00022.jpg



View of acceptable vegetation control.

LM Start	2.89	Rating **	N	Issue No.	ie No. 3		
LM End	2.89	Issue Type +	Ma	Location *		WS	
Earthen Levee			GPS La	atitud	e/Longitude		
Category	tegory			Start		End	
Item	Trim / Thi	n Trees		37.8038	27 °	37.803827 °	
пеш				-121.3724	24 °	-121.372424 °	
DWR ID	DWR ID DWR_RD2062_02_s _ 2012_3						
	Action/Comments						

Tree stumps.

Inspector Comments: Three small tree stumps.

Photo 1 of 1 : FA_2014_	_RD2062_	310_3_20	0141001_0	0003.jpg	g
	W. Jr				
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A STANDARD					
1100					

Three small stumps on levee slope.

LM Start	2.94	Rating **	N	Issue No.		13	
LM End	2.94	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Trim / Thi	n Trees		37.80406	0 °	37.804060 °	
item				-121.37324	5 °	-121.373245 °	
DWR ID	DWR ID DWR_RD2062_02_s _ 2012_13					·	
	Action/Comments						

Tree stumps.

Inspector Comments: Four small oak stumps on levee slope.



View of tree stumps on waterside slope. 05/17/2012

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.03	Rating **	N	Issue No.		14
LM End	3.03	Issue Type +	Ма	Location *	WS	
Category Earthen Levee			GPS La	tituc	le/Longitude	
Calegory	ategory			Start		End
Item	Trim / Thi	n Trees		37.8044	52 °	37.804452 °
item				-121.3749	)3 °	-121.374903 °
DWR ID	WR ID DWR_RD2062_02_s _ 2012_14					
Action/Comments						

Tree stumps.



View of the tree stump in the middle of the photo.

LM Start	3.07	Rating **	N	Issue No.	15		
LM End	3.07	Issue Type +	Ma	Location *	WS		
Earthen Levee			GPS La	atitud	le/Longitude		
Category	ategory			Start		End	
Item	Trim / Thi	n Trees		37.8044	81 °	37.804481	0
item				-121.3755	10 °	-121.375510	0
DWR ID	DWR_RD2		·				
Action/Comments							

Tree stumps.



View of the tree stumps on the waterside levee slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.27	Rating **	С	Issue No.		2		
LM End	3.28	Issue Type +	Ма	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory	egory				Start			
Item	DWR Ero	sion Survey		37.8046	)4 °	37.804604	0	
ILEIII				-121.3794	54 °	-121.379454	0	
DWR ID								

No Photos

#### Action/Comments

Inspector Comments: 08/26/2014: The erosion was repaired.

08/28/2013: No significant change observed.

07/26/2012: Site was visited on 07/26/2012. No significant change

09/02/2011: No significant change observed on site from last visit. 09/22/2010: No significant change observed on site. The fencing located on the berm was removed. Levee slope and berm area 10 feet from the levee toe are bare of any vegetation. The 1- to 2 feet of nearvertical scarp on the levee toe is unchanged.

03/09/2010: As discussed with Michael Moncrief of MBK Engineer, the district will address the site this year.

7/27/2009: 1 to 2 feet of near-vertical scarp on the levee toe; damage was most likely caused by agricultural equipment during clearing or tilling operation; this is a maintenance-related issue. [2014 Site ID:RD2062U02RM2.14]

LM Start	3.44	Rating **	С	Issue No.		1
LM End	3.53	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR Ero	sion Survey		37.80542	22 °	37.805422 °
пеш				-121.3831	73 °	-121.383173 °
DWR ID						

Action/Comments

Inspector Comments: 08/26/2014: The erosion was repaired.

08/28/2013: No significant change observed.

07/31/2012: Site was visited on 07/26/2012. No significant change observed.

09/02/2011: No significant change observed.

09/22/2010: No significant change observed. The foot-high near-vertical scarp still exists on levee toe. There is little to no vegetation on the slope.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be addressed this year.

07/27/2009: 1 to 2 feet of near-vertical scarp on levee toe; damage was most likely caused by farming equipment during clearing or tilling operation; this is a maintenance-related issue. [2014 Site ID:RD2062U02RM1.94]

No Photos

Location

N/A: Not Applicable

LS : Land Side WS : Water Side

Acceptable

Minimally Acceptable U : Unacceptable

C : Corrected A/W: Acceptable but Monitor & Maintain

N : Not Inspected/Rated

+ Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.45	Rating **	С	Issue No.		41		
LM End	3.45	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thin Trees			37.8054	55 °	37.805455	٥	
пеш				-121.3822	35 °	-121.382235	0	
DWR ID	DWR_RD2	2_41						
	Action/Comments							

No Photos

Rating \*\* Issue No. LM Start 3.68 С WS Issue Type + Ma Location \* LM End 3.68 Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 37.806231 ° 37.806231 ° Item -121.386209 ° -121.386209 DWR RD2062 02 s 2012 9 DWR ID Action/Comments

No Photos

Tree stumps.

Inspector Comments: Small stump on slope.

Trim trees to at least five feet above ground level.

LM Start	3.71	Rating **	М	Issue No.		8	
LM End	3.71	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Erosion / Bank Caving			37.80634	7°	37.806347 °	
пеш			-121.38669	)2 °	-121.386692 °		
DWR ID	DWR_RD2	4_8					
		Action/	Comme	nts			

Schedule repair of erosion site prior to the next inspection.



View of the erosion from surface runoff on the waterside levee slope.

\* Location

LS : Land Side N/A : Not Applicable

WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	-0.03	Rating **	U	Issue No.		1		
LM End	0.07	Issue Type +	Ма	Location *	WS			
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR Ero	sion Survey		37.80967	3°	37.809673	0	
пеш				-121.39032	1 °	-121.390321	0	
DWR ID								

Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Site is at the upstream of a drainage ditch. [2014 Site ID:RD2062U03RM29.93]

		All Norman	
10.50			

Photo 1 of 1: SJR2014\_RD2062U03RM29.93\_1.jpg

Front view of the erosion.

LM Start	80.0	Rating **	N	Issue No.		3	
LM End	0.08	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.8097	27 °	37.809727°	
item				-121.3891	00 °	-121.389100 °	
DWR ID	DWR_RD2062_03_f _ 2012_3					·	
		Action/	Comme	nts			

Tree stumps.

# Photo 1 of 1: FA\_2014\_RD2062\_311\_3\_20141001\_00003.jpg



View of tree stumps on waterside slope.

LM Start	0.10	Rating **	U	Issue No.		2
LM End	0.11	Issue Type +	Ma	Location *		WS
Category				GPS Latitude/Longitude		
Category			Start		End	
Item	DWR Ero	sion Survey		37.8100	52 °	37.810052 °
пеш				-121.38884	47 °	-121.388847 °
DWR ID						
	Action/Comments					

Inspector Comments: 07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Hard to view the erosion because of the dense vegetation and trees on site. The site is under the bush, close to the tree. [2014 Site ID:RD2062U03RM30.02]



Front view of the site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.17	Rating **	N	Issue No.	6		
LM End	0.17	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitu			
Calegory				Start		End	
Item	Trim / Thin Trees			37.81019	4 °	37.810194	
пеш				-121.38760	2 °	-121.387602	
DWR ID	DWR_RD2	062_03_s _ 201	12_6				
		Action/	Comme	nts			
Tree stum	ps.						

No Photos

LM Start	0.18	Rating **	M Issue No.			4		
LM End	0.18	Issue Type +	Ma	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Category		Start		End				
Item	DWR Ero	DWR Erosion Survey				37.810468	0	
пеш				-121.387492	2°	-121.387492	0	
DWR ID								
			_					

Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The protection at the levee toe has been washed away. [2014 Site ID:RD2062U03RM30.1]

# Photo 1 of 1 : SJR2014\_RD2062U03RM30.1\_1.jpg

Direct view of the site.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.23	Rating **	U	Issue No.		5	
LM End	0.32	Issue Type +	Ма	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category					End	
Item	DWR Ero	sion Survey		37.81060	)9 °	37.810609 °	
пеш	item		-121.38587	79 °	-121.385879 °		
DWR ID							

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism. There is a lack of berm along this reach, exposing the levee slope to high flow velocities during normal and flood events.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the site will be 'addressed' later this year.

09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per CLRO CES Evaluation 2008 Report; previously rated "M".

11/05/2008: Top of vertical scarp has rip rap that appears to be sliding; rodent holes; existing toe rip rap. [2014 Site ID:RD2062U03RM30.19]



Front view of the site with dense vegetation.

LM Start	0.35	Rating **	М	Issue No.		8	
LM End	0.35	Issue Type +	Ma	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
ltom	ltem DWR Erosion Survey			37.8112	81 °	37.811281 °	
пеш				-121.3844	61 °	-121.384461 °	
DWR ID						·	
Action/Comments							

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The site is right at the downstream of a river bend. [2014 Site ID:RD2062U03RM30.27]



Front view of the erosion.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.56	Rating **	М	Issue No.		9		
LM End	0.57	Issue Type +	Type + Ma Location		Location *			
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	DWR Erosion Survey			37.81307	70 °	37.813070		
пеш				-121.38310	00°	-121.383100 °		
DWR ID								

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

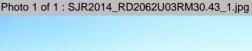
09/07/2010: No significant change observed on site. Much of the placed rip rap revetment has slid. It is no longer adequately protecting the slope.

08/06/2010: Recommended as local maintenance issue, per CLRO Report.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be 'addressed' this year.

09/29/2009: No major change observed since last visit; a section of the rip rap has slipped, exposing a levee section that has eroded; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM30.43,LM0.63; previously rated "U".

11/05/2008: Site is located inside of a bend; scarp looks to be into the levee prism; piles of concrete chunks placed on the slope, with some of them already starting to slide. [2014 Site ID:RD2062U03RM30.43]





Front view of the site. Rip rap no longer adequately protecting levee slope.

LM Start	0.61	Rating **	N	Issue No.	10			
LM End	0.61	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
ltom	Trim / Thi	n Trees		37.8135	70°	37.813570	٥	
пеш	Item				94 °	-121.382094	0	
DWR ID DWR_RD2062_03_s _ 2012_10								
	Action/Comments							

Tree stumps.

Inspector Comments: Stump in slope.



05/11/2011 Stump in slope, new growth in center of photo is at the location of the stump.

Location + Issue Type Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS : Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.65	Rating **	N	Issue No.		12		
LM End	0.65	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Trim / Thin Trees			37.8138	94 °	37.813894	0	
item		-121.381680 °		-121.381680	0			
DWR ID DWR_RD2062_03_s _ 2012_12								
Action/Comments								

Tree stumps.

Inspector Comments: 2 stumps on waterside slope.



View of the tree stumps on the waterside levee slope.

LM Start	0.82	Rating **	A/W	Issue No.		11		
LM End	0.82	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Erosion /	Bank Caving		37.816315 °		37.816315 °		
пеш			-121.381587 °		° -121.381587 °			
DWR ID DWR_RD2062_03_s _ 2012_11								
Action/Comments								

Schedule repair of erosion site prior to the next inspection. Inspector Comments: Cracking developing along the waterside levee hinge.

Photo 1 of 2 : FA_2014_RD2062_311_11_20141001_00010.jpg
The second residence is not an in-
Color of the State
09/24/72013

View of cracking at waterside levee hinge.

LM Start	0.82	Rating **	A/W	Issue No.	11 (cont)
LM End	0.82	Issue Type +	Ma	Location *	WS

Photo 2 of 2: FA\_2014\_RD2062\_311\_11\_20141001\_00011.jpg



View of slope erosion from foot traffic.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.20	Rating **	ting ** U Issue No			13	
LM End	1.21	Issue Type +	Ма	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Erosion Survey			37.8192	90 °	37.819290 °	
item				-121.3788	80 °	-121.378880 °	
DWR ID							

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the



Front view of the site.

LM Start	1.37	Rating **	A/W	Issue No.	18		
LM End	1.37	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
ltom	Vegetatio	/egetation			85 °	37.820885 °	
Item				-121.3769	86 °	-121.376986 °	
DWR ID	DWR_RD2062_03_s _ 2012_18					·	
	Action/Comments						

Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberry bush blocks visibility.

# Photo 1 of 1 : FA\_2014\_RD2062\_311\_18\_20141001\_00015.jpg



05/11/2011 Elderberry bush on water side slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.42	Rating **	U	Issue No.	20		
LM End	1.43	Issue Type +	Ма	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
ltom	DWR Erosion Survey			37.821380	°	37.821380 °	
Item				-121.376900	°	-121.376900 °	
DWR ID							

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. There is a small-to medium sized Oak tree on the mid-slope just above rip rap. Some of the rip rap has collapsed, creating a pocket erosion just above the existing toe rip rap and upstream of the Oak tree.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' in 2010.

09/29/2009: No major change since last visit; sliding of the rip rap at the base of the lone tree; there is noticeable man-made trail and foot traffic extending from the crown to the toe; much of the broken concrete used as temporary rip rap has slid, exposing portion of the bare levee slope; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.3, LM1.45; previously rated "M".

11/05/2008: Portion of rip rap collapsing.

09/14/2006: Portion of rip rap along the slope has collapsed; exposed levee section is starting to erode, exposing roots from the nearby tree. [2014 Site ID:RD2062U03RM31.28]



Front view of the site.

LM Start	1.52	Rating **	N	Issue No.	14		
LM End	1.52	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thi	Trim / Thin Trees			88°	37.821388 °	
item				-121.37494	7 °	-121.374947 °	
DWR ID	DWR_RD2	12_14					
Action/Comments							

Tree stumps.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.67	Rating **	N	Issue No.		15
LM End	1.67	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Trim / Thi	n Trees		37.8208	90 °	37.820890
item			-121.372227 °		-121.372227 °	
DWR ID	DWR_RD2	062_03_s _ 201	12_15			
Action/Comments						
Tree stum	ps.					

Photo 1 of 1: FA\_2014\_RD2062\_311\_15\_20141001\_00014.jpg



View of the tree stump on the waterside levee slope.

LM Start	1.78	Rating **	N	Issue No.		16
LM End	1.78	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory				Start		End
ltom	Trim / Thi	Trim / Thin Trees			02 °	37.820902 °
Item				-121.3705	65 °	-121.370565 °
DWR ID	DWR_RD2062_03_s _ 2012_16					
Action/Comments						

Tree stumps.

No Photos

LM Start	<b>2.15</b> Rating ** A/W			Issue No.	19		
LM End	2.15	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Encroach	Encroachments			5 °	37.818645 °	
пеш				-121.36489	4 °	-121.364894 °	
DWR ID	DWR_RD2062_03_s _ 2012_19						
		Action/	Comme	nts			

Pipe

Inspector Comments: Irrigation intake.



View of the pump house on the waterside levee slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence
D: Design & System Obsolescence
En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.83	Rating **	N	Issue No.	22		
LM End	2.83	Issue Type +	Ma	Location *	WS		
Catagonia Earthen Levee				GPS La	titud	le/Longitude	
Category			Start		End		
Item	Trim / Thin Trees			37.8163	41 °	37.816341	0
item		-121.354008 °		08 ° -121.354008 °			
DWR ID	DWR_RD2	062_03_s _ 201	2_22				
		Action/	Comme	nts			
Tree stum	ps.						

No Photos

LM Start	2.90	Rating **	N	Issue No.	23		
LM End	2.90	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory						End	
Item	Trim / Thin Trees			37.81633	80 °	37.816330 °	
пеш			-121.35277	'5 °	-121.352775 °		
DWR ID	DWR_RD2	062_03_s _ 201					
	Action/Comments						
Tree stum	ps.						

No Photos

LM Start	3.07 Rating ** N			Issue No.		25	
LM End	3.07	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS La	tituc	le/Longitude		
Category				Start		End	
Itom	Trim / Thi	n Trees		37.81779	91 °	37.817791	0
Item				-121.35008	88 °	-121.350088	0
DWR ID	DWR_RD2						
Action/Comments							

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

Tree stumps.

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

**FINAL DATA** 

+ Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.14	3.14 Rating ** N			e No. 26		
LM End	3.14	Issue Type +	Ma	Location * WS			
Cotogony	Earthen Levee			GPS La	atituc	le/Longitude	
Category				Start		End	
Item	Trim / Thi	Trim / Thin Trees			32 °	37.818532 °	
item				-121.3495	10°	-121.349510 °	
DWR ID	DWR_RD2062_03_s _ 2012_26						
Action/Comments							

Tree stumps.



View of the tree stump on the waterside levee slope.

LM Start	3.28	Rating **	A/W	Issue No.	21		
LM End	3.28	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Animal Co	Animal Control			66 °	37.820166 °	
пеш				-121.3480	77 °	-121.348077 °	
DWR ID	DWR_RD2062_03_s _ 2014_21						
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: LMA is actively controlling rodent population and is scheduling to backfill the holes prior to fall inspection.

Photo 1 of 1 : FA_2014_RD2062_311_21_20141001_00018.jpg
09/22/2014
The second second
View of the redent helps on the waterside leves slope

View of the rodent holes on the waterside levee slope.

LM Start	3.44	Rating **	С	Issue No.	28		
LM End	3.44	Issue Type +	Ма	Location *	WS	WS	
Catagory	Earthen L	GPS Latitude/Longitude					
Category				Start		End	
ltom	Trim / Thin Trees			37.8191	72 °	37.819172	0
Item				-121.3457	60 °	-121.345760	0
DWR ID	DWR_RD2	062_03_s _ 201					
		Action/	Comma	nte			

Tree stumps.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.80	Rating **	С	Issue No. 53			
LM End	3.80	Issue Type +	Ma	Location *	cation * WS		
Category Earthen Levee			GPS Lat	itud	e/Longitude		
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.81716	o °	37.817160	0
пеш				-121.34093	3 °	-121.340933	0
DWR ID	DWR_RD2						
Action/Comments							

No Photos

This trace to allow visibility of the ground and room

Thin trees to allow visibility of the ground and room to flood fight. Inspector Comments: Beaver damaged a tree; remove from slope.

LM Start	4.18	Rating **	С	Issue No.		32	
LM End	4.18	Issue Type +	Ma	Location *	WS		
Category	Earthen L	GPS La	tituc	le/Longitude			
Calegory				Start		End	
Item	Animal Co	Animal Control			88 °	37.820688	0
item				-121.33848	33 °	-121.338483	0
DWR ID	DWR_RD2		·				
Action/Comments							

No Photos

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

LM Start	4.20	Rating **	N	Issue No. 33		33	
LM End	4.20	Issue Type +	Ma	Location *		WS	
Category	Earthen L	GPS Latitude/Longitude					
Calegory				Start		End	
Trim / Thin Trees		n Trees		37.8204	07 °	37.820407	0
пеш				-121.3381	22 °	-121.338122	0
DWR ID	DWR_RD2	062_03_s _ 201	12_33				
		Action/	Commo	nte			

No Photos

Tree stumps.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

#### **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	4.51	Rating **	С	Issue No.	17		
LM End	4.51	Issue Type +	Ма	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category	alegory			Start		End	
Animal Control		37.81802	27 °	37.818027 °			
пеш	Item			-121.33361	2 °	-121.333612 °	
DWR ID DWR_RD2062_03_f _ 2012_17							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	4.82	Rating **	N	Issue No.		7	
LM End	4.82	Issue Type +	Ma	Location *		LS	
Earthen Levee			GPS Latitude/Longitude				
Category	egory		Start		End		
Item	Trim / Thin Trees		37.8139	86 °	37.813986	٥	
пеш				-121.3358	21 °	-121.335821	٥
DWR ID DWR_RD2062_03_s _ 2012_7							

Action/Comments

Tree stumps.

Inspector Comments: 14" stump on landside slope.



10/21/2011 Photo taken the next day. Stump can be seen in the lower center of the photo.

LM Start	4.83	Rating **	С	Issue No.		43	
LM End	4.83	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee		GPS Latitude/Longitude				
Calegory				Start		End	
Item	Animal Co	ontrol		37.81279	91 °	37.812791	0
item				-121.33607	74 °	-121.336074	0
DWR ID	DWR_RD2	062_03_s _ 201	2_43				
		A - 1' 1	<u> </u>	-1-			

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	4.95	Rating **	М	Issue No.	35	
LM End	4.95	Issue Type +	Ма	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Erosion / Bank Caving			37.812225 °		37.812225 °	
пеш			-121.336112 °		-121.336112 °	
DWR ID DWR_RD2062_03_f _ 2014_35						
Action/Comments						
Note and monitor erosion site. Inspector Comments: 2 to 3 feet vertical cut possibly caused by previous floods.						



View of a 2-3 feet vertical cut at the landside levee toe.